

NATIONAL PRIMATE RESEARCH CENTERS

National Primate Research Center Consortium
Statement on the Critical Role of Primate Centers in Translational Research
Submitted to the
National Institutes of Health (NIH) Scientific Management Review Board
(SMRB) Translational Medicine and Therapeutics (TMAT) Working Group
November 19, 2010

California NPRC
Dallas Hyde, PhD
University of California
Davis, CA 95616
Phone: (530) 752-0420
Fax: (530) 754-6228

New England NPRC
Ronald Desrosiers, PhD
Harvard Medical School
One Pine Hill Drive
P.O. Box 9102
Southborough, MA 01772
Phone: (508) 624-8002
Fax: (508) 460-0612

Oregon NPRC
Nancy Haigwood, PhD
Oregon Health & Science Univ.
505 NW. 185th Avenue
Beaverton, OR 97006
Phone: (503) 690-5500
Fax: (503) 690-5569

Southwest NPRC
John VandeBerg, PhD
P.O. Box 760549
San Antonio, TX 78245
Phone: (210) 258-9430
Fax: (210) 670-3309

Tulane NPRC
Andrew Lackner, DVM, PhD
Tulane University
18703 Three Rivers Road
Covington, LA 70433
Phone: (985) 892-2040
Fax: (985) 893-1352

Washington NPRC
David Anderson, DVM
University of Washington
Box 357330
1705 N.E. Pacific St, I-421 HSB
Seattle, WA 98195
Phone: (206) 543-1430
Fax: (206) 616-6771

Wisconsin NPRC
Jon Levine, PhD
University of Wisconsin
1220 Capitol Court
Madison, Wisconsin 53715
Phone: (608) 263-3500
Fax: (608) 265-2067

Yerkes NPRC
Stuart Zola, PhD
Emory University
Atlanta, GA 30322
Phone: (404) 727-7707
Fax: (404) 727-0623

Washington Representative
Erica Froyd
Lewis-Burke Associates LLC
1341 G Street, NW, Eighth Fl.
Washington, DC 20005
Phone: (202) 289-7475
Fax: (202) 289-7454

The National Primate Research Center (NPRC) Consortium is pleased to submit the following statement outlining how the eight National Institutes of Health (NIH)-supported NPRCs are integral to translational medicine and therapeutics activities at NIH. **The NPRC Consortium requests that as the Translational Medicine and Therapeutics Working Group develops recommendations on organizing NIH's components to optimize translational research, it incorporate NPRCs into the new NIH translational medicine program to ensure our resources and capabilities are maximized for the improvement of human health.**

Supported by the National Center for Research Resources (NCRR), NPRCs are vital research centers that provide biomedical and behavioral investigators with access to valuable animal models, as well as expert consultation on utilizing these models to advance the aims of their research projects. As the model most closely related to humans, non-human primates are key components of basic and translational research funded by each NIH institute and center, and of important trans-NIH initiatives, such as Clinical and Translational Science Awards (CTSAs). In particular, non-human primates are essential to bridging the gap between basic, discovery science and the development of safe and effective treatments and therapeutics for patients, providing proof-of-concept that is frequently needed for clinical development.

Recently, the NPRC Consortium, in coordination with NCRR, embarked on the development of an NPRC strategic plan. At the center of this plan are scientific priorities that drive translational work into better interventions and diagnostics for improved human health. Thus, the future direction of NPRCs is based upon the scientific strengths and capacity of the consortium as a whole and is geared toward enhancing translational research and therapeutics development.

NPRCs offer scientific expertise, technologies, and unique infrastructure to advance translational research. Studies in non-human primates are essential to advancing therapeutics development, as they are indispensable models for human responses to many new pharmaceuticals, biotechnology products, cell and tissue transplants, gene transfer and targeting methods, surgical approaches, and diagnostic procedures and technologies. The NPRCs also expand biomedical informatics approaches to support research. We believe that biomedical informatics management is one of the biggest challenges facing NIH as it seeks to organize its translational medicine program, and NPRCs have developed new methods to collect, store, and share the information produced by non-human primate studies. The NPRCs believe that by working more closely with NIH, these data resources can be more efficiently integrated into the biomedical informatics network that informs translational research activities.

In addition to having an integral role in NIH's translational research activities, the NPRCs are significantly involved in activities tied to the other themes identified by Director Francis Collins. Of note, the Centers are leaders in the development and application of high throughput technologies to animal model systems, in addition to data storage. In relation to global health, the Centers provide direct support for human and animal health studies, as well as education and conservation efforts with international academic partners. The Centers also have a long-standing commitment to the mentorship and development of young researchers through training and fellowship programs at all of our locations. Some of these trainees are physician scientists who see patients on a regular basis, but want additional training in basic sciences and greater access to preclinical non-human primate studies. A subset of these physician scientists become staff scientists at the NPRCs and participate in translational research.

The eight NPRCs have long been focused on moving basic research into discoveries that will impact specific diseases and conditions. A 2010 survey of the eight NPRCs revealed that each has a variety of research foci that span the breadth of human diseases and conditions, including, autism; Alzheimer's disease and other neurodegenerative diseases; basic immunology and immunopathogenesis; cancer; substance abuse; Parkinson's disease; fertility and infertility; heart disease; diabetes and metabolic syndrome; obesity; bone-related diseases; stem cell therapies; psychological and behavioral disorders; gamete biology; cell and gene-based therapies; maternal-fetal health; asthma; infectious diseases, such as HIV/AIDS, hepatitis, tuberculosis, and malaria; and broadly applicable vaccine and therapeutic development programs.

NPRCs provide functional capabilities that enable NIH-supported researchers to accelerate research and therapeutic discovery. Non-human primates are an important tool to better understand human diseases and facilitate the development of effective interventions. The NPRCs together are a coordinated infrastructure with a shared goal of accelerating progress in understanding human disease, leading to better health. Our collaborative nature allows for integration with other NIH resources, such as CTSA's. It is important that the NPRCs' long-standing and ongoing central role in translational research be recognized and incorporated into the new NIH translational medicine program.